New York State Department of Transportation STRUCTURES DIVISION STRUCTURES DESIGN ADVISORY CODE: 97-002 SUBJECT: REMOVING STEEL Issued by: SUPERSTRUCTURES OR MAIN OFFICE **SUBSTRUCTURES** STRUCTURES DIVISION DATE: 5/15/97 CONTAINING LEAD-BASED **PAINT** SUBJECT CODE: 7.35-4 SUPERSEDES: APPROVED BY: m. O'll NONE

This Design Advisory discusses material to be included in the contract documents if the project includes removal of one or more steel superstructures (or steel substructures) containing lead-based paint under Section 202 of the Standard Specifications.

Removal of steel superstructures (or steel substructures) involves dismantling the various components, either by removal of fasteners (bolts or rivets) at connections, by flame cutting of members, by hydraulic shearing, or by other mehods. Often a combination of methods is used.

Due to concerns regarding worker exposure to lead, the Occupational Safety and Health Administration (OSHA) and the Standard Specifications require lead-based paint to be removed at locations of fastener removal or flame cutting, prior to these operations, unless the Contractor can demonstrate that other methods can meet OSHA requirements for worker protection. Limits of paint removal at these locations are described in Specification Subsection 202-3.05. Permitted methods of paint removal are described in Material Subsection 741-01.

The cost of removing the lead-based paint described in the preceding paragraphs shall be included in the lump sum price(s) bid for the Superstructure Removal item(s); Item 202.12nnnn M. (In the case of a steel substructure, the cost shall be included in the unit price bid for Item 202.19 M.) Neither a Paint Removal item nor a Containment item is required. Environmental Ground and/or Waterway Protection items (Items 570.09nnnn M and/or 570.10nnnn M) will be required, as well as a Treatment and Disposal of Paint Removal Waste item (Item 571.01nnnn M).

In order to describe the above work and to specify payment, the following note should be placed on either the Bridge Note sheet or the Superstructure (or Substructure) Removal sheet:

STRUCTURES DESIGN ADVISORY CODE: 97-	DATE: 5/13/97	PAGE: 2	
SUBJECT: REMOVING STEEL SUPERSTRUCTURES OR SUBSTRUCTURES CONTAINING LEAD- BASED PAINT			

SUPERSTRUCTURE (OR SUBSTRUCTURE) REMOVAL NOTES:

LIMITS AND METHODS FOR REMOVAL OF PAINT AT LOCATIONS OF FASTENER REMOVAL OR FLAME CUTTING SHALL BE AS DESCRIBED IN SUBSECTIONS 202-3.05 AND 741-01 OF THE STANDARD SPECIFICATIONS. THE COST OF PAINT REMOVAL SHALL BE INCLUDED IN THE LUMP SUM PRICE(S) BID FOR THE SUPERSTRUCTURE REMOVAL ITEM(S) (OR THE UNIT PRICE BID FOR THE SUBSTRUCTURE REMOVAL ITEM). PAINT WASTE NOT COLLECTED BY VACUUM METHODS SHALL BE COLLECED USING THE ENVIRONMENTAL GROUND AND/OR WATERWAY PROTECTION ITEM(S). WASTE SHALL BE DISPOSED OF USING THE TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE ITEM.

In addition to paint removal described above at locations of dismantling and removal operations, there may exist areas of loose or peeling paint on various steel surfaces which are likely to become dislodged during removal operations or during transportation from the site. If this condition is confirmed, either by referring to the latest Bridge Inspection Report, by observation by the designer or by Regional personnel at the request of the designer, the following note should be placed on either the Bridge Note sheet or the Superstructure (or Substructure) Removal sheet:

LOOSE AND/OR PEELING PAINT ON STEEL SURFACES MAY BECOME DISLODGED DURING REMOVAL OPERATIONS OR DURING TRANSPORTATION FROM THE SITE UNLESS APPROPRIATE MEASURES ARE TAKEN. THE CONTRACTOR SHALL FORMULATE AND SUBMIT A METHOD OF REMEDIATING THE CONDITION FOR APPROVAL BY THE ENGINEER. WORKER LEAD PROTECTION IN ACCORDANCE WITH OSHA 1926.62 MUST BE SATISFIED. ALTERNATIVES COULD INCLUDE TRANSPORTING AFFECTED MEMBERS IN CLOSED TRUCKS, WRAPPING AFFECTED MEMBERS PRIOR TO REMOVAL, ENCAPSULATING THE LOOSE PAINT OR REMOVAL OF LOOSE PAINT PRIOR TO DISMANTLING OPERATIONS. THE COST OF REMEDIATING THIS CONDITION SHALL BE INCLUDED IN THE LUMP SUM PRICE(S) BID FOR THE SUPERSTRUCTURE REMOVAL ITEM(S) (OR THE UNIT PRICE BID FOR THE SUBSTRUCTURE REMOVAL ITEM). THE USE OF ENVIRONMENTAL GROUND AND/OR WATERWAY PROTECTION ITEMS WILL BE REQUIRED. DEPENDING ON THE ALTERNATIVE CHOSEN, THE TREATMENT AND DISPOSAL OF PAINT REMOVAL WASTE ITEM MAY BE REQUIRED. BECAUSE OF THE ABOVE-MENTIONED CONDITION, THE CONTRACTOR SHOULD EXAMINE THE CONDITION OF THE STRUCTURE'S PAINT PRIOR TO SUBMITTING A BID.

STRUCTURES DESIGN ADVISORY CODE: 97	DATE: 5/13/97	PAGE: 3	
SUBJECT: REMOVING STEEL SUPERSTRUCTURES OR SUBSTRUCTURES CONTAINING LEAD-BASED PAINT			

Finally, El 95-014 provides the following criteria needed to determine if additional health and safety controls are required for a specific project. According to this El, controls are required on projects where rehabilitation, repair or demolition of structures coated with lead-based paint is a "major item" of work (currently defined in Specification Subsection 109-16 as being any item which exceeds \$50,000 or 2% of the total contract bid price, whichever is less).

If the criteria for such controls are met, the following note should be placed on either the Bridge Note sheet or the Superstructure (or Substructure) Removal sheet:

THE FOLLOWING ITEMS SHALL BE USED TO IMPLEMENT AND MAINTAIN EFFECTIVE HEALTH AND SAFETY CONTROLS:

- LEAD HEALTH AND SAFETY PROGRAM
- LEAD EXPOSURE CONTROL PLAN
- MEDICAL TESTING AND EXPOSURE MONITOR SAMPLE ANALYSIS
- DECONTAMINATION FACILITIES

Pay items for the above, a percentage of which is to be included in the bridge estimate, are 18570.01 M, 18570.02 M, 18570.03 M and 18570.04 M, respectively.

If the criteria for requiring the above-mentioned controls are not met, the note on Worker Lead Protection from EI 93-034 will be inserted into the contract documents by DQAB.

Refer to the NOTES FOR PROPOSAL, PRELIMINARY PLAN TEAR SHEET AND CONTRACT PLANS; recently distributed. Notes 85 through 87, together with the guide note immediately proceeding them beginning on page B45, are rescinded. Replace them with the three notes contained in this Design Advisory, preceded by the following guide note:

Use Notes 85, 86 if applicable, and 87 if applicable according to El 95-014, if a steel superstructure containing lead-based paint is being removed: